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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,556	03/23/2004	Sarah Jane Mears	EL0508USNA	2562

23906 7590 06/06/2006

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WILMINGTON, DE 19805

EXAMINER
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KOPEC, MARK T

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**SUPPLEMENTAL**  
**Office Action Summary**

Application No.

10/806,556

Applicant(s)

MEARS, SARAH JANE

Examiner

Mark Kopec

Art Unit

1751

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/23/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1751

This action is responsive to applicant's amendment/remarks filed 02/23/06. Claims 1-13 are currently pending with claims 4-5 withdrawn from consideration.

Applicant's election with traverse of Group I in the reply filed on 02/23/06 is acknowledged. The traversal is on the ground(s) that a search of Group I would likely be the same as a search of Group II. This is not found persuasive because, as stated in the Restriction requirement, the searches required for the distinct groups are not coextensive.

The requirement is still deemed proper and is therefore made FINAL.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 6-9, and 11-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Okamoto et al (5,616,173), Carroll et al (5,162,062) or Oba et al (5,670,089).

This rejection is maintained for the reasons set forth in the Rejection mailed 08/26/05 (Pages 4-7).

Applicant's arguments filed 02/23/06 have been fully considered but they are not persuasive.

Applicant's discussion of the claimed invention at page 5 of the response is noted.

Art Unit: 1751

Initially, the examiner notes applicant's statement (at page 6 of the response) "...the presently claimed composition does not contain an inorganic binder (described in claim 1)...". The examiner respectfully disagrees. While the claimed does not require the presence of a binder, such is not excluded. The instant claim language "consisting essentially of" does not exclude inorganic binder(s) from the claim. In fact, instant claim 2 requires "...said inorganic binder is present at less than 1.0 wt% of the total solids in the composition".

With respect to Okamoto, applicant argues the reference teaches 1-20% inorganic binder, which is outside the scope of claims 1 and 2. As stated above, claim 1 does not exclude the presence of inorganic binder. With respect to claim 2, a careful examination of Okamoto discloses inorganic binder within the claimed range. Each of the compositions disclosed in Table 1 meet the claimed limitations (0.80% glass total, i.e. 0.98 wt% glass with respect to solids). The reference specifically or inherently meets all claimed limitations.

Applicant's discussion of Carroll (pages 7-8 of response) is noted. Applicant argues the reference does not "teach that adhesion can be obtained without, or with less than 0.5%, of an inorganic binder (page 7 of response). Additionally, applicant argues, "Carroll et al does not describe compositions which

Art Unit: 1751

contain inorganic binder less than 0.5% total solids in the composition.

The examiner respectfully maintains that Carroll discloses compositions containing each of the required ingredients within their required proportions. The examples disclosed in Table 5, which contain frit/Ag in ratios from 0.016-0.026, meet each of **the claimed limitations**. Furthermore, the fact that Carroll teaches the presence of additional components such as sintering inhibitor, or teaches utility a multilayer circuit, does not make the disclosure inapplicable to the instant claims.

With respect to Oba, applicant argues "The present invention, when inorganic binder is included, does not require a PbO containing frit. Furthermore, the composition of claim 1 does not contain an inorganic binder" (page 8).

As stated above, claim 1 does not exclude the presence of inorganic binder. With respect to claim 2, a careful examination of the recited Markush group includes several lead containing frits.

Note the following new grounds of rejection.

Claim 10 is rejected under 35 U.S.C. 102(b) as anticipated by Chacko et al (6,228,288).

Chacko discloses a polymer film conductive composition comprising, based on total composition: (a) 3-20 wt. % of

Art Unit: 1751

polyamide-imide resin; (b) 0-10 wt. % cyanate ester resin; (c) 40-85 wt. % finely divided metallic electrically conductive particles selected from the group consisting of silver, copper, nickel, silver coated copper, silver coated nickel, carbon black, graphite and mixtures thereof, wherein all of (a), (b) and (c) are dispersed in a 20-40 wt. % organic solvent (Abstract; Col 4, lines 10-20). The conductive paste thus prepared is applied to substrates such as polyimide, ceramic and fiber reinforced phenolic substrates by conventional screen printing processes. A preferred substrate is polyimide. The wet film thickness typically used for position sensor application is 40  $\mu\text{m}$  (Col 4, lines 33-40). The reference specifically or inherently meets each of the claimed limitations.

The reference is anticipatory.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action

Art Unit: 1751

is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Kopec  
Primary Examiner  
Art Unit 1751

MK

May 10, 2006